AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

On page 1, above the title, insert the following heading:

TITLE

On page 1, below the title, please insert the following headings and paragraph:

CROSS-REFERENCE TO RELATED APPLICATIONS:

This application claims priority to PCTFR04/02800, filed on October 29, 2004, which claims priority to French Patent Application No. 03 12914, filed on November 4, 2003.

TECHNICAL FIELD

Please amend the first full two paragraphs on page 1 by combining the two paragraphs into a single paragraph, and please insert the following heading as follows **(note to examiner: the paragraph numbering is consistent with the paragraph numbering of the application as published as US2008/0035797-A1)**:

[0001] ~~The invention relates to~~ A satellite attitude control by exchange of angular momenta delivered by a plurality of inertial actuators having rotary members mounted on the satellite platform is disclosed. ~~[00002] The invention relates m~~ More particularly, ~~to~~ a method and ~~to~~ a system for controlling the attitude of what are called agile satellites is disclosed, ~~that is to say those capable of very rapid attitude maneuvers,~~ which are equipped with an attitude control system comprising at least two gyrodynes.

BACKGROUND

Please insert the following heading on page 5, above ¶[0018] and amend ¶[0018] as follows:

SUMMARY OF THE DISCLOSURE

[0018] To alleviate the aforementioned drawbacks of the prior art (use of two control moment gyros to create torques along an axis, or along two axes, but with strong implementation constraints), ~~the invention proposes~~ a satellite attitude control system is disclosed that comprises a pair of control moment gyros and at least a third actuator in a configuration different from those known from the prior art, in particular the patents U.S. Pat. No. 5,681,012 and U.S. Pat. No. 6,360,996, so as to achieve attitude control along three axes of the satellite, and also rapid tilts, with guidance and control laws that are very simple to implement, and with controlled inter-axis couplings.

On page 7, please enter the following heading above ¶[0027] and amend ¶[0027] as follows:

BRIEF DESCRIPTION OF THE DRAWINGS

[0027] Other advantages and features of the ~~invention~~ the disclosed embodiments will become apparent from the description given below, by way of a nonlimiting example, with reference to the appended drawings in which:

On page 8, above ¶[0032] please insert the following heading and amend ¶[0032] as follows:

DETAILED DESCRIPTION OF THE PRESENTLY PREFERRED EMBODIMENTS

[0032] To implement the disclosed satellite attitude control method ~~according to the invention~~, one possible~~, but not unique,~~ embodiment of the control system is the following. The satellite attitude control system comprises~~, according to the invention~~:

Please amend ¶[0060] that bridges pages 16-17 as follows:

[0060] The disclosed three-axis attitude control system and method ~~according to the invention~~ thus make it possible, by minimizing the number of main actuators of the control moment gyro type, and therefore allowing substantial savings in terms of weight, power, volume and cost, to control satellites for which agility essentially about two axes is required.

Please amend the abstract as follows:

~~The invention relates to a~~ A method of controlling the attitude of a satellite (1) ~~comprising~~ including two gyrodynes (3,4) and a third main actuator (2) which delivers torques at least along the Z axis. The ~~inventive~~ method ~~consists in~~ includes: fixing the gimbal axes, A1 and A2, of the gyrodynes (3, 4) parallel to Z; setting a non-zero bias (α) between the angular momentum vectors (Formula I) of the gyrodynes; using the measurements provided by the sensors on board the satellite to estimate the kinematic and dynamic variables necessary in order to control the attitude of the satellite (1); calculating set variables in order to ~~realize~~ realize the objectives assigned to the satellite (1) attitude control system; and using the deviations between the estimated variables and the set variables to calculate control orders and to send same to the main actuators (2, 3, 4) ~~in order to control the changing deviations over time, the control orders transmitted to the gyrodynes (3, 4) comprising orders which are used to vary the orientation of the gimbal axis thereof~~.